Merritt Parkway, New Canaan Road/Route 123 Bridge
Spanning New Canaan Road/Route 123 at the 15.96
mile mark on the Merritt Parkway at exit 38
Norwalk
Fairfield County
Connecticut

HAER No. CT-87

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
U.S. Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

HAER CONN, 1-NORWA, 9-

HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway, New Canaan Road/Route 123 Bridge

HAER No. CT-87

Location:	Spanning New Canaan Road/Route 123 at the 15.96 mile mark on the Merritt Parkway in Norwalk, Fairfield County, Connecticut at exit 38 UTM: 18.629510.4554335 Quad: Norwalk North, Connecticut
Construction Date:	1937
Engineer:	Connecticut Highway Department
Architect:	George L. Dunkelberger, of the Connecticut Highway Department, acted as head architect for all Merritt Parkway bridges.
Contractor:	Mariani Construction Company New Haven, Connecticut
Present Owner:	Connecticut Department of Transportation Wethersfield, Connecticut
Present Use:	Used by traffic on the Merritt Parkway to cross New Canaan Avenue/Route 123
Significance:	The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge design and the individuality of each structure, makes them distinctive.
Historians:	Todd Thibodeau, HABS/HAER Historian Corinne Smith, HAER Engineer August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

In 1640, Roger Ludlow acquired land along the east side of the Norwalk River from the Long Island Sound to twelve miles inland. A couple of months later Daniel Patrick, a friend of Ludlow, purchased a similar amount of acreage on the west side of the river. These two acquisitions encompassed all of present-day Norwalk.[1]

Ten years passed between these purchases and settlement of the region. In 1650, Ludlow sold his land to residents of the Hartford Colony. That same year, these new owners moved to what is now East Norwalk, under the leadership of two surveyors, Richard Olmstead and Richard Webb. In 1651, Norwalk formed a town. The community gradually expanded as an agricultural and shipping center. At one point Norwalk included parts of Wilton, New Canaan, and Westport. By the beginning of the American Revolution, Norwalk included the districts of Norwalk, South Norwalk, East Norwalk, West Norwalk, Broad River, Silvermine, Winnipauk, and Cranbury.[2]

In summer 1779 the British burned more than 300 structures in the town. The community took several years to rebound from this loss, but by the early 1800s, Norwalk was again an expanding agricultural and shipping community. Larger scale industrial development commenced in 1848, when the New York, New Haven, and Hartford Railroad reached the Norwalk River. Norwalk became a hat-making center. The Volk Hat Company employed more than 500 workers. Other substantial enterprises developed, including the Norwalk Lock Company, Norwalk Iron Works, and Roth and Goldschmidt

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[1]———, This Is Norwalk (Norwalk: League of Women Voters, 1963), 5.

[2]Samuel Richard Weed, Norwalk After Two Hundred and Fifty Years (South Norwalk: C. A. Freeman Publishers, 1901), 18-19.

Corset Company. Fueling this development was the arrival of large numbers of Irish and German immigrants.[3]

Following World War I, Norwalk experienced another population boom, as many New Yorkers who had vacationed in Norwalk for years settled permanently and began to commute. These new arrivals eagerly awaited completion of the Merritt Parkway. After it was finished, the parkway helped to accelerate the residential development of the western sections of the community, especially Winnipauk and Cranbury. During World War II watchtowers were established on the Merritt to spot airplanes and relay the information to Mitchell Field on Long Island.[4]

BRIDGE CONSTRUCTION HISTORY

New Canaan Road/Route 123 was historically the main link between the agricultural community of New Canaan and the market at Norwalk. The Daniel Deering Construction Company of Norwalk, CT, received the contract to grade the Merritt Parkway from South Avenue/Route 124, in New Canaan, to New Canaan Road/Route 123, in Norwalk (ConnDot project #180-34). While the New Canaan Road/Route 123 Bridge is within this section of the Merritt, the grade separation and bridge contract went to the Mariani Construction Company of New Haven, CT (ConnDot project #180-49).[5] The bridge cost

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[3]This Is Norwalk, 5-6.

[4]Deborah Wing Ray and Gloria P. Stewart, Norwalk Being an Historical Account of That Connecticut Town, (Canaan, NH: Phoenix Publishing, 1979), 194, 200.
This Is Norwalk, 6.
"3000 Attend Merritt Parkway Opening; Hear Cross Voice Hope For Extension," Norwalk Hour, 30 June 1938, p. 1.

[5]Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

$37,645 and was completed in 1937. The paving work for this region of the Merritt extended from Lapham Avenue, in New Canaan, to Comstock Hill Road, in Norwalk. This contract was awarded to the New Haven Construction Company of New Haven, CT (ConnDot project# 180-94). The New Canaan Road/Route 123 Bridge has received little maintenance since it was built.[6]

BRIDGE DESCRIPTION

The New Canaan Avenue Bridge is a single-span deck bridge comprising six steel rigid frames that span 64'. Parallel wing walls form the approach for the overpass. The Merritt Parkway travels over the bridge at a skew of 38°-44'-30", with a clear roadway 60' wide.

Spaced 11' on center, the steel frames support a 9" thick reinforced-concrete slab that cantilevers 5' past the outer frames. The rigid-frame design allows the engineer to decrease the structural material at the center of the span, thus forming an arched opening. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The intrados of the span rises 4'-4-1/4" from the springline to the crown, while the extrados rises several inches from the knee to the crown. The frame thickness at the crown is 18". The inner radius of the knee of the frame is 12", and the outer is 64'. The inside face of each leg remains vertical for a height of 14' above the footing, while the outside face slopes to thicken the leg from 2'-6" at the footing to over 4'-3" at the knee. The legs of the frame, are completely encased in concrete, bear on a rectangular, reinforced-concrete footing and are attached to it with four anchor bolts.

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[6]New Canaan Road/Route 123 Bridge, DOT #715; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

The steel frames are I-sections built up from 6" equal leg angles covered with plates for flanges and 1/2"-thick plates for webs. All flange and web pieces are connected with 7/8"-diameter rivets. Web stiffeners each side of the web are spaced about 4'-6" apart across the span and on the legs. Channel sections serve as cross braces for adjacent frames. The drawings specify that the steel was to be painted with a mix of red lead and oil in the shop and finished with two coats of "Standard Grey Bridge Paint" in the field in the shade picked by the engineer. The frames are now a dark green-blue.

The architectural detailing of the bridge utilizes Gothic elements. Pointed arches define the balustrade and frame recesses in two faces of the triangular-shaped pylons. The arches at the pylons contain tracery with circular- and spade- shaped foils. The posts of the railing are marked by a step in the rail and a foliated pattern.

Presently, the concrete is spalling at the spandrel and cracking at the pylons. Vines are also creeping across the spandrel.

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Weed, Samuel Richard. Norwalk After Two Hundred and Fifty Years, An Account of the Celebration of the 250th Anniversary of the Charter of the Town. South Norwalk: C. A. Freeman Publishers, 1901.

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Norwalk Hour. 1937-38.

———. Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.

-------. Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.